

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
15 April 2004 (15.04.2004)

PCT

(10) International Publication Number
WO 2004/030631 A3

(51) International Patent Classification⁷: **A61K 39/12**,
48/00, 31/00

(21) International Application Number:
PCT/US2003/031320

(22) International Filing Date: 1 October 2003 (01.10.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/416,660 1 October 2002 (01.10.2002) US
60/414,649 1 October 2002 (01.10.2002) US

(71) Applicant (*for all designated States except US*): **CHIRON CORPORATION** [US/US]; 4560 Horton Street, Emeryville, CA 94608 (US).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **KAVANAUGH, W., Michael** [US/US]; 4560 Horton Street, Emeryville, CA 94608 (US). **SLOAN, David, L.** [US/US]; 4560 Horton Street, Emeryville, CA 94608 (US). **MACKICHAN, Mary, Lee** [US/US]; 4560 Horton Street, Emeryville, CA 94608 (US).

(74) Agent: **ALEXANDER, Lisa, E.**; Corporate Patent Counsel, Chiron Corporation, 4560 Horton Street, Emeryville, CA 94608 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:
16 September 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ANTI-CANCER AND ANTI-INFECTIOUS DISEASE COMPOSITIONS AND METHODS FOR USING SAME

(57) Abstract: The present invention provides methods and compositions for treating and/or preventing cancer in a subject via administration of a non-pathogenic virus. The present invention also provides methods and compositions for treating and/or preventing infectious diseases in a subject via administration of a non-pathogenic.

WO 2004/030631 A3

Rec'd

PTO

31 MAR 2005

10/530000

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/31320

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61K 39/12, 48/00, 31/00

US CL : 514/44; 424/204.1, 85.1

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 514/44; 424/204.1, 85.1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

DIALOG: EMBASE, BIOSIS, MEDLINE, CA SEARCH; WEST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------|
| Y | US 6,451,303 B1 (WHITEHOUSE et al) 17 September 2002 (17.09.2002), Abstract, Claims 1-7. | 1-148 |
| Y | US6,200,959 B1 (HAYNES et al) 13 March 2001 (13.03.2001), Abstract, Claims 1-11. | 1-148 |



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

| | | | |
|-----|---|-----|--|
| "A" | document defining the general state of the art which is not considered to be of particular relevance | "T" | later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention |
| "E" | earlier application or patent published on or after the international filing date | "X" | document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone |
| "L" | document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) | "Y" | document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art |
| "O" | document referring to an oral disclosure, use, demonstration or other means | "&" | document member of the same patent family |
| "P" | document published prior to the international filing date but later than the priority date claimed | | |

Date of the actual completion of the international search

28 June 2004 (28.06.2004)

Date of mailing of the international search report

06 AUG 2004

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

James Housel

Telephone No. 703-308-1235